

UNITED STATES INTERNATIONAL TRADE COMMISSION
WASHINGTON, D.C.

In the Matter of CERTAIN LIGHT ENGINES AND COMPONENTS THEREOF	Investigation No. 337-TA-____
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**COMPLAINT OF LUMENCOR, INC. UNDER
SECTION 337 OF THE TARIFF ACT OF 1930. AS AMENDED**

COMPLAINANT:

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TABLE OF SUPPORTING MATERIALS

Non-Confidential Exhibits	
Ex. No.	Description
1	U.S. Patent No. 9,574,722 (Non-Certified Copy, Certified Copy Forthcoming)
2	U.S. Patent No. 9,395,055 (Non-Certified Copy, Certified Copy Forthcoming)
3	U.S. Patent No. 8,493,564 (Non-Certified Copy, Certified Copy Forthcoming)
4	Assignment Record of U.S. Patent No. 9,574,722 (Non-Certified Copy, Certified Copy Forthcoming)
5	Assignment Record of U.S. Patent No. 9,395,055 (Non-Certified Copy, Certified Copy Forthcoming)
6	Assignment Record of U.S. Patent No. 8,493,564 (Non-Certified Copy, Certified Copy Forthcoming)
7	Excelitas X-Cite® FIRE Brochure
8	Excelitas X-Cite® FIRE Webpage (dated Jan. 2, 2018)
9	Excelitas Press Release Introducing the X-Cite® FIRE (dated Oct. 31, 2017)
10	Excelitas Slideshow titled "Introducing X-Cite® FIRE" (dated Oct. 2017)
11	LDGI CE Declaration of Conformity for the X-Cite® FIRE Model Nos. XT710S, XT710L, XT711S, XT711L (dated Dec. 4, 2017)
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Ex. No.	Description
22	[CONFIDENTIAL] Domestic Industry Exhibit

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B	U.S. Patent No. 9,395,055 Prosecution History (Non-Certified Copy, Certified Copy Forthcoming)
C	U.S. Patent No. 8,493,564 Prosecution History (Non-Certified Copy, Certified Copy Forthcoming)
D	Cited References for U.S. Patent Nos. 9,574,722 and 9,395,055 ¹
E	Cited References for U.S. Patent No. 8,493,564

¹ The technical references in the '722 Patent and the '055 Patent overlap completely and are therefore included as one Appendix.

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I. INTRODUCTION

1. This Complaint is filed by Lumencor, Inc. (“Lumencor” or “Complainant”), pursuant to Section 337 of the Tariff Act of 1930, as amended, 19 U.S.C. § 1337 (“Section 337”), based on the unlawful sale for importation into the United States, importation into the United States, and/or sale within the United States after importation of the certain light engines and/or components thereof (“Accused Products”) that infringe patents owned by Lumencor. The Accused Products include, but are not limited to, the X-Cite[®] FIRE LED Fluorescence Illuminator devices, which are manufactured and/or imported by the proposed Respondents: Excelitas Technologies Corp. (“Excelitas”) and its wholly owned subsidiary, Lumen Dynamics Group Inc. (“LDGI”), (together, “Respondents”).

2. The Accused Products infringe, either literally or under the doctrine of equivalents, one or more of: claims 1–6, 10–11, and 16–19 of U.S. Patent No. 9,574,722 (“the ’722 Patent,” Ex. 1), claims 1–3, 5, 7, 9, 11–13, 15, 17 and 20 of U.S. Patent No. 9,395,055 (“the ’055 Patent,” Ex. 2), and claims 1, 4, 6–7, 9, 16, and 18 of U.S. Patent No. 8,493,564 (“the ’564 Patent,” Ex. 3) (collectively, “the Asserted Lumencor Patents”), in violation of Section 337(a)(1)(B).

3. As required by Sections 337(a)(1)(A) and (a)(2)–(3), an industry exists in the United States relating to Lumencor’s Light Engines protected by the Asserted Patents (“Domestic Industry Products”). Those products include the ASTRA[®], AURA II[®], AURA III[®], LYNX[®], MONSTRA II[®], SPECTRA[®], SPECTRA FIA[®], SPECTRA X[®], SPECTRA III[®], SOLA FISH[®], SOLA SE[®], SOLA SM[®], TARGA[®], and MIRA[®] light engines. Lumencor’s Domestic Industry Products sold domestically are designed, developed, assembled, manufactured, and supported in the United States.

4. Lumencor seeks a permanent limited exclusion order (“LEO”) under 19 U.S.C. § 1337(d)(1) barring from entry into the United States certain Accused Products and components

thereof that infringe the Asserted Lumencor Patents, and which are imported, sold for importation, or sold within the United States after importation by or on behalf of the Respondents in violation of Section 337.

5. Lumencor further seeks permanent cease-and-desist orders (“CDOs”) under Section 337(f) against the proposed Respondents prohibiting the sale, offer for sale, advertising, marketing, packaging, distribution, maintenance of inventory, or solicitation of any sale of imported Accused Products that infringe one or more claims the Asserted Lumencor Patents.

6. Lumencor seeks the imposition of a bond covering the importation, sale, or other transfer of the Accused Products and components thereof that infringe one or more claims of the Asserted Lumencor Patents during the 60-day Presidential review period, pursuant to Section 337(j), to prevent further injury to Lumencor’s domestic industry due to Respondents’ infringement.

II. THE PARTIES

A. The Complainant

7. Complainant Lumencor, Inc. is a corporation incorporated and existing under the laws of the State of Delaware. Lumencor, Inc.’s principal place of business at 14940 NW Greenbrier Parkway, Beaverton, Oregon. Lumencor was co-founded in 2006, by Dr. Steven M. Jaffe, Ph.D. and Dr. Claudia B. Jaffe, Ph.D. The Asserted Lumencor Patents were assigned by the inventors to Lumencor, Inc., and Lumencor owns all rights and interests pertaining thereto. *See* Exhibits 4–6.

8. Lumencor is a life-sciences technology company and a leading innovator, designer, and manufacturer of commercial high-quality light engines that facilitate rapid, sensitive, and accurate analysis. Lumencor’s Domestic Industry Products provide innovative, powerful, pure, stable, durable, and cost-effective lighting solutions across a number of life science industries.

9. Lumencor developed the Domestic Industry Products from the ground up. The Domestic Industry Products are the world's first mercury-free bioanalysis lighting equipment with a novel architecture that provides powerful and intense light, spectral breadth and purity, a fast switching speed, long lives and stable outputs, and efficient easy-to-use products. Lumencor's management, research, and design team have extensive experience in the lighting technologies industry. Lumencor's Domestic Industry Products have been, and continue to be, used in research laboratories throughout the United States.

10. Lumencor has dedicated significant human and financial resources in the United States to invent, design, develop, manufacture, assemble, test, and calibrate the Domestic Industry Products. Furthermore, Lumencor has filed patent applications to protect inventive aspects of its Domestic Industry Products. Those filings have resulted in multiple issued United States patents, including the Asserted Lumencor Patents.

11. Lumencor has invested significant human and financial resources within the United States in connection with the research, design, development, and testing of its Domestic Industry Products. Lumencor continues to make significant and substantial investments in the United States with respect to its Domestic Industry Products.

B. The Respondents

1. Excelitas Technologies Corp.

12. Respondent Excelitas is a Delaware corporation with its corporate headquarters located at 200 West Street, Waltham, Massachusetts. As detailed below, Excelitas imports into the United States, sells for importation, and/or markets, sells and distributes within the United States after importation one or more Accused Products that directly infringe one or more claims of the Asserted Lumencor Patents.

13. On information and belief, Excelitas imports the Accused Products into the United States through its wholly-owned subsidiary, LDGI, and/or sells and distributes within the United States the Accused Products.

2. Lumen Dynamics Group Inc.

14. Respondent LDGI is a company organized and existing under the laws of Canada, having a principal place of business at 2260 Argenta Road, Mississauga, Ontario, Canada. LDGI is a wholly owned subsidiary of Excelitas. Proposed Respondent LDGI manufactures and imports the Accused Products into the United States.

15. On information and belief, LDGI is the manufacturer, in whole or in part, and importer of the Accused Products.

III. THE ASSERTED LUMENCOR PATENTS

A. The '722 Patent

1. Identification of the Patent and Ownership

16. United States Patent No. 9,574,722 is titled "Light Emitting Diode Illumination System" and issued on February 21, 2017. The '722 Patent expires on August 6, 2028, and is based on U.S. Patent Application No. 14/723,267 filed on May 27, 2015, which is a continuation of application No. 14/102,659 filed on December 11, 2013, now U.S. Patent No. 9,062,832, which is a continuation of application No. 13/968,178 filed on August 15, 2013, which is a continuation of application No. 13/344,815 filed on January 6, 2012, which is a continuation of application No. 12/186,475 filed on August 5, 2008, and which claims priority to provisional application No. 60/954,140 filed on August 6, 2007. The '722 Patent has twenty (20) claims, including two (2) independent claims and eighteen (18) dependent claims. A copy of the '722 Patent is attached to

the Complaint as Exhibit 1.²

17. The inventor of the '722 Patent, Thomas J. Brukilacchio, assigned his rights in the '722 Patent to Lumencor, Inc. on August 5, 2008. Lumencor, Inc. therefore owns, by assignment, all rights, title, and interest in and to the '722 Patent. A copy of the '722 Patent assignment from the named inventor to Lumencor, Inc. is attached to the Complaint as Exhibit 4.³

18. Pursuant to Commission Rule 210.12(c)(1), together with this Complaint, Lumencor has filed four (4) copies of the prosecution history of the '722 Patent as Appendix A.⁴ Pursuant to Commission Rule 210.12(c)(2), together with this Complaint, Lumencor has filed four (4) copies of all technical references identified in the prosecution history of the application leading to the issuance of the '722 Patent as Appendix D.

² Exhibit 1 is a non-certified copy of the '722 Patent. A certified copy has been ordered and will be submitted when obtained.

³ Exhibit 4 is a non-certified copy of the '722 Patent Assignment. A certified copy has been ordered and will be submitted when obtained.

⁴ Appendix A is a non-certified copy of the '722 Patent prosecution history. A certified copy has been ordered and will be submitted when obtained.

2. Foreign Counterparts

19. Pursuant to Commission Rule 210.12(a)(9)(v), the chart below identifies all foreign patents and applications (not already issued as a patent), and each foreign application that has been denied, abandoned, or withdrawn corresponding to the '722 Patent.

U.S. Patent No. 9,574,722					
Application Date	Application Number	Status	Patent Date	Patent No.	Country
08/06/2008	2008/0797316	Pending			EPO
08/06/2008	PCT/US2008/072394	Pending			WIPO

20. To the best of Lumencor's knowledge, information, and belief, there are no other foreign patents issued or foreign patent applications pending, filed, abandoned, withdrawn, or rejected corresponding to the '722 Patent.

B. The '055 Patent

1. Identification of the Patent and Ownership

21. United States Patent No. 9,395,055 is titled "Light Emitting Diode Illumination System" and issued on July 19, 2016. The '055 Patent expires on August 6, 2028, and is based on U.S. Patent Application No. 14/724,297 filed on May 28, 2015, which is a continuation of application No. 14/148,005 filed on January 6, 2014, now U.S. Patent No. 9,068,703, which is a continuation of application No. 13/926,681 filed on June 25, 2013, now U.S. Patent No. 8,625,097, which is a continuation of application No. 13/584,390 filed on August 13, 2012, now U.S. Patent No. 8,493,564, which is a continuation of application No. 13/012,658 filed on January 24, 2011, now U.S. Patent No. 8,279,442, which is a continuation of application No. 12/187,356, now U.S. Patent No. 7,898,665, and which claims priority to U.S. Provisional Patent Application No. 60/954,140 filed on August 6, 2007. The '055 Patent has twenty (20) claims, including three (3)

independent claims and seventeen (17) dependent claims. A copy of the '055 Patent is attached to the Complaint as Exhibit 2.⁵

22. The inventors of the '055 Patent, Thomas J. Brukilacchio and Arlie R. Conner, assigned their rights in the '055 Patent to Lumencor, Inc. on August 1 and 5, 2008. Lumencor, Inc. therefore owns, by assignment, all rights, title, and interest in and to the '055 Patent. A copy of the '055 Patent assignment from the named inventors to Lumencor, Inc. is attached to the Complaint as Exhibit 5.⁶

23. Pursuant to Commission Rule 210.12(c)(1), together with this Complaint, Lumencor has filed four (4) copies of the prosecution history of the '055 Patent as Appendix B.⁷ Pursuant to Commission Rule 210.12(c)(2), together with this Complaint, Lumencor has filed four (4) copies of all technical references identified in the prosecution history of the application leading to the issuance of the '055 Patent as Appendix D.

2. Foreign Counterparts

24. Pursuant to Commission Rule 210.12(a)(9)(v), to the best of Lumencor's knowledge, information, and belief, there are no foreign patents or foreign patent applications pending, filed, abandoned, withdrawn, or rejected corresponding to the '055 Patent.

⁵ Exhibit 2 is a non-certified copy of the '055 Patent. A certified copy has been ordered and will be submitted when obtained.

⁶ Exhibit 5 is a non-certified copy of the '055 Patent Assignment. A certified copy has been ordered and will be submitted when obtained.

⁷ Appendix B is a non-certified copy of the '055 Patent prosecution history. A certified copy has been ordered and will be submitted when obtained.

C. The '564 Patent

1. Identification of the Patent and Ownership

25. United States Patent No. 8,493,564 is entitled "Light Emitting Diode Illumination System" and issued on July 23, 2013. The '564 Patent expires on August 6, 2028, and is based on U.S. Patent Application No. 13/584,390 filed on August 13, 2012, which is a continuation of application No. 12/012,658 filed on January 24, 2011, which is a continuation of application No. 12/187,356, and which claims priority to U.S. Provisional Patent Application No. 60/954,140 filed on August 6, 2007. The '564 Patent has twenty (20) claims, including four (4) independent claims and sixteen (16) dependent claims. A copy of the '564 Patent is attached to the Complaint as Exhibit 3.⁸

26. The inventors of the '564 Patent, Thomas J. Brukilacchio and Arlie R. Conner, assigned their rights in the '564 Patent to Lumencor, Inc. on August 1 and 5, 2008. Lumencor, Inc. therefore owns, by assignment, all rights, title, and interest in and to the '564 Patent. A copy of the '564 Patent assignment from the named inventors to Lumencor, Inc. is attached to the Complaint as Exhibit 6.⁹

27. Pursuant to Commission Rule 210.12(c)(1), together with this Complaint, Lumencor has filed four (4) copies of the prosecution history of the '564 Patent as Appendix C.¹⁰ Pursuant to Commission Rule 210.12(c)(2), together with this Complaint, Lumencor has filed four

⁸ Exhibit 3 is a non-certified copy of the '564 Patent. A certified copy has been ordered and will be submitted when obtained.

⁹ Exhibit 6 is a non-certified copy of the '564 Patent Assignment. A certified copy has been ordered and will be submitted when obtained.

¹⁰ Appendix C is a non-certified copy of the '564 Patent prosecution history. A certified copy has been ordered and will be submitted when obtained.

(4) copies of all technical references identified in the prosecution history of the application leading to the issuance of the '564 Patent as Appendix E.

2. Foreign Counterparts

28. Pursuant to Commission Rule 210.12(a)(9)(v), to the best of Lumencor's knowledge, information, and belief, there are no foreign patents or foreign patent applications pending, filed, abandoned, withdrawn, or rejected corresponding to the '564 Patent.

D. Licenses to the Asserted Lumencor Patents

29. There are no licensees of the Asserted Lumencor Patents.

IV. NON-TECHNICAL DESCRIPTION OF THE PATENTED INVENTION¹¹

30. Each of the Asserted Lumencor Patents is directed to an illumination system that includes what Lumencor calls a light pipe. The light pipe solves a specific problem for life-science illumination systems, which require high-intensity light across the visible spectrum. While red and blue high-intensity light emitting diodes ("LEDs") are readily available, the so-called green gap had precluded the manufacture of green LEDs of sufficient intensity for this application. The light pipe includes a luminescent crystal and arrays of high intensity blue LEDs. Luminescent material in the crystal absorbs the high intensity blue light and then emits high intensity green light. The light pipe also includes optical features to direct the high-intensity green light such that it exits predominantly through a small exit surface. In this way, the light pipe solves the need for high-intensity green light. The high-intensity green light from the light pipe is provided to additional optical components of the illumination system which combine the high-intensity green

¹¹ The non-technical descriptions of the Asserted Lumencor Patents are provided herein for the purpose of general information and understanding, and is not meant to express a position with respect to claim construction and/or other technical aspects of patent law. Lumencor presents these statements subject to and without waiver of its right to argue that claim terms should be construed in a particular way under claim interpretation jurisprudence and the relevant evidence.

light with light of different colors and output the combined light (or different colors as required) in a manner suitable for transmitting the light to an optical instrument such as a microscope, analytical instrument, or medical instrument.

A. The '722 Patent—Light Emitting Diode Illumination System

31. In particular, the '722 Patent generally relates to a unique construction for an illumination system. The illumination system includes a light pipe light source and two LED light sources. The three light sources each produce different colors of light which are combined by several reflective components to generate white light. In a particular implementation, the light pipe generates green light and the LED light sources generate red and blue light. The white light is received by an output system which focuses the white light into a light guide. A light guide is a small diameter fiber optic light guide or liquid light guide which transports the white light to an instrument.

B. The '055 Patent—Light Emitting Diode Illumination System

32. In particular, the '055 Patent generally relates to a unique construction for an illumination system. The illumination system includes a light pipe light source and three LED light sources. The four light sources each produce different colors of light. The light from each of the four light sources is collimated and then directed by a plurality of optical components onto a main optical axis where it is received by an output system. The output system focuses the light into a light guide. A light guide is a small diameter fiber optic light guide or liquid light guide which transports the white light to an instrument.

C. The '564 Patent—Light Emitting Diode Illumination System

33. In particular, the '564 Patent generally relates to a unique construction for an illumination system. The illumination system includes a light pipe light source and three LED light sources. The four light sources each produce different colors of light. Each light source is

associated with a collimator which collimates the light generated by the light sources. The light from each of the four light sources is then optically combined onto a main optical axis of the illumination system. In particular cases the light from each of the four light sources is optically directed into a light guide.

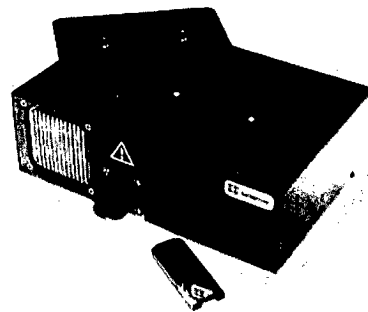
V. PRODUCTS AT ISSUE

A. Complainant Lumencor's Domestic Industry Products

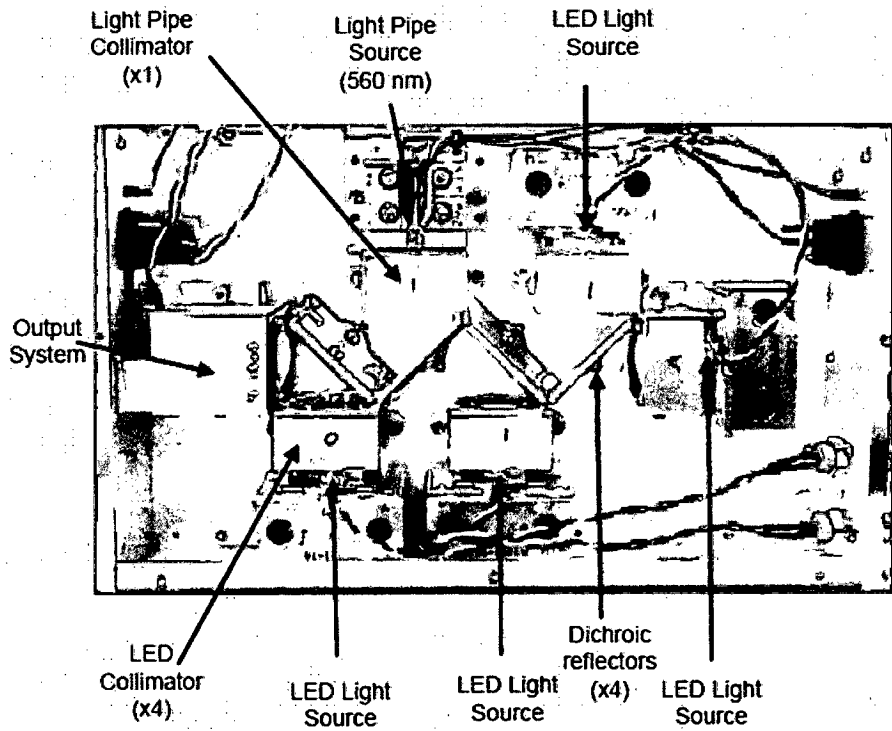
34. The Domestic Industry Products are Lumencor's light engines, which provide an illumination system used in the life sciences as an analytical tool. Lumencor's Domestic Industry Products are currently sold by authorized distributors world-wide.

35. Lumencor's Domestic Industry Products include their ASTRA[®], AURA II[®], AURA III[®], LYNX[®], MONSTRA II[®], SPECTRA[®], SPECTRA FIA[®], SPECTRA X[®], SPECTRA III[®], SOLA FISH[®], SOLA SE[®], SOLA SM[®], TARGA[®], and MIRA[®] lines of light engines.

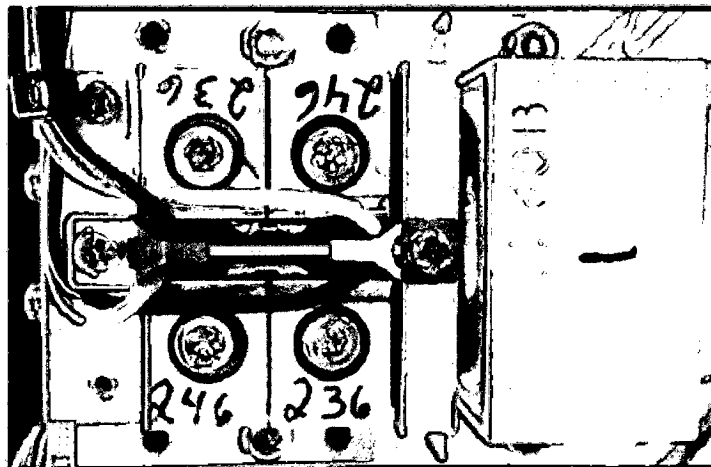
36. Exemplary images of Lumencor's Domestic Industry Products are reproduced below:

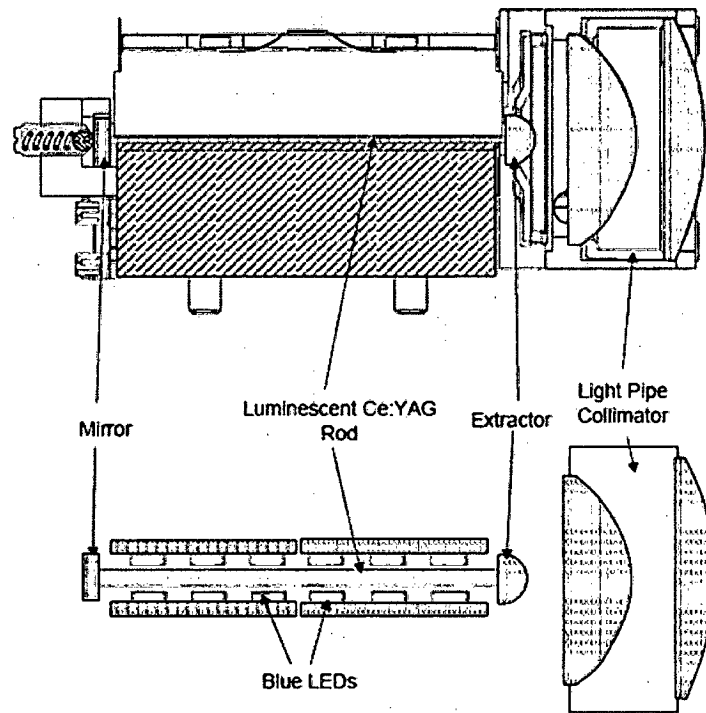


37. A plain view image of all the Optical Components in the Lumencor SOLA® line of Domestic Industry Products is reproduced below:



38. A closer image and diagram of the Light Pipe Source Component in the Lumencor SOLA® line of Domestic Industry Products are reproduced below:





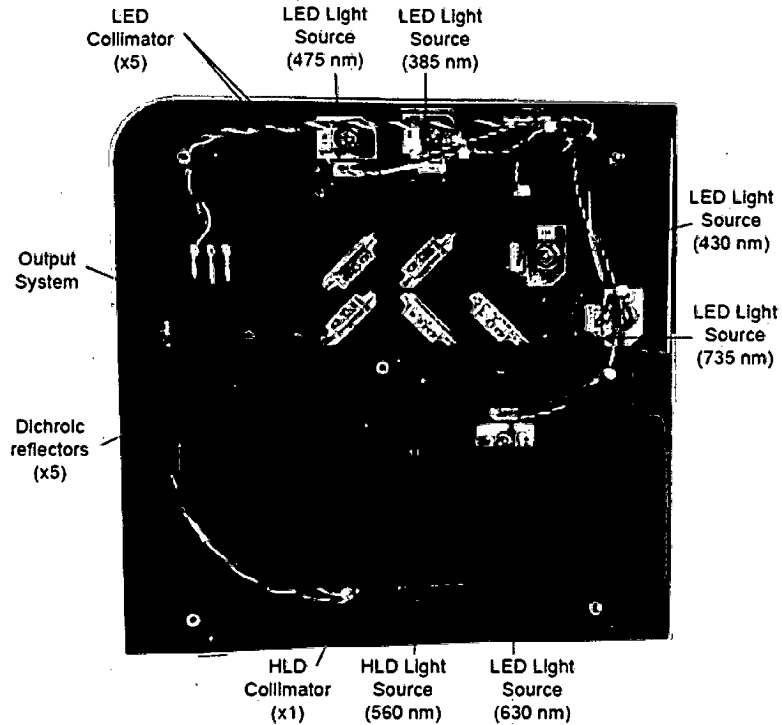
B. Respondents' Accused Products

39. Respondents' Accused Products are light engines. The Accused Products include all models of the X-Cite[®] FIRE LED Fluorescence Illuminator devices as described, for example, in the X-Cite[®] FIRE Brochure, attached hereto as Exhibit 7, the Excelitas X-Cite[®] FIRE Webpage (dated Jan. 2, 2018), attached hereto as Exhibit 8, the Excelitas Press Release Introducing the X-Cite[®] FIRE (dated Oct. 31, 2017), attached hereto as Exhibit 9, the Excelitas slideshow titled "Introducing X-Cite[®] FIRE" (dated Oct. 2017), attached hereto as Exhibit 10, and the LDGI CE Declaration of Conformity for the X-Cite[®] FIRE Model Nos. XT710S, XT710L, XT711S, XT711L (dated Dec. 4, 2017), attached hereto as Exhibit 11.

40. A sample Accused Product, the Excelitas X-Cite® FIRE Model is pictured below:



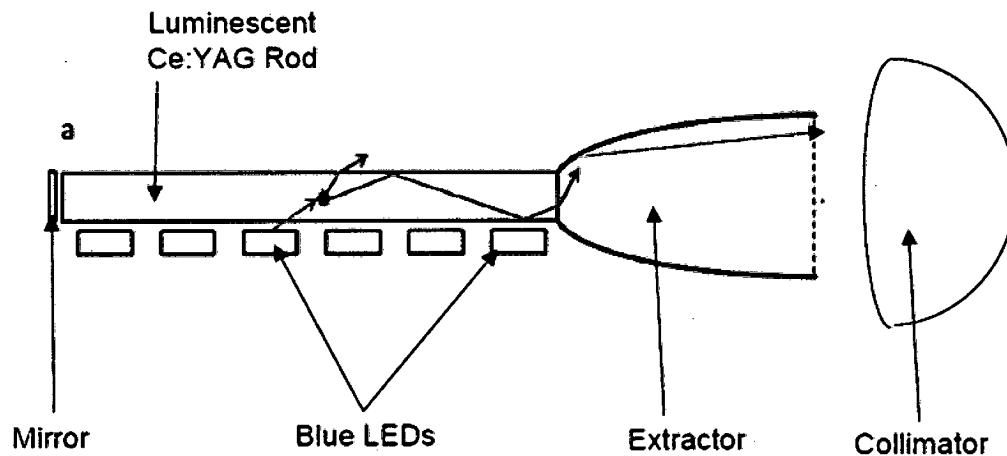
41. A plain view image of all the Optical Components in the Excelitas X-Cite Fire Accused Product is reproduced below:



42. A closer image and diagram of the high lumen density (HLD) Source Component on the Accused Product are reproduced below:



43. As explained in greater detail below, on information and belief, the Accused Products infringe one or more claims of the '722 Patent, '055 Patent, and '564 Patent, which are related to Lumencor's Light Engines.



**VI. UNLAWFUL AND UNFAIR ACTS OF PROPOSED RESPONDENTS—
PATENT INFRINGEMENT**

A. Infringement of the '722 Patent

44. The Accused Products include all elements of at least independent claims 1 and 16 and dependent claims 2–6, 10–11, and 17–19 of the '722 Patent, either literally or under the doctrine of equivalents.

45. A claim chart that applies each of the asserted independent claims, claims 1 and 16, to a representative Accused Product is attached as Exhibit 12.

B. Infringement of the '055 Patent

46. The Accused Products include all elements of at least independent claims 1, 11, and 20 and dependent claims 2–3, 5, 7, 9, 12–13, 15, and 17 of the '055 Patent, either literally or under the doctrine of equivalents.

47. A claim chart that applies each of the asserted independent claims, claims 1, 11, and 20, to a representative Accused Product is attached as Exhibit 13.

C. Infringement of the '564 Patent

48. The Accused Products infringe all elements of at least independent claims 1, 16, and 18 and dependent claims 4, 6–7, and 9 of the '564 Patent, either literally or under the doctrine of equivalents.

49. A claim chart that applies each of the asserted independent claims, claims 1, 16, and 18, to a representative Accused Product is attached as Exhibit 14.

VII. RELATED LITIGATION

50. There is currently no other litigation concerning the subject matter of this Complaint.

VIII. SPECIFIC INSTANCES OF UNFAIR IMPORTATION AND SALE

51. On information and belief, Respondents manufacture, offer for sale for importation, sell for importation, import, and/or sell in the United States after importation, Accused Products that infringe one or more claims of the Asserted Lumencor Patents. Specific instances of sale for importation, importation and/or sale within the United States after importation of Accused Products by the Respondents are set forth below. These examples are exemplary in nature and are not intended to restrict the scope of any remedy the Commission may order.

52. Lumencor purchased a sample Accused Product, an X-Cite® FIRE Model No. XT710S from a U.S.-based third-party distributor and/or reseller, BioVision Technologies, Inc., located at 64 E. Uwchlan Ave. #273, Exton, PA, 19341 (“BioVision”).

53. The sample Accused Product was delivered to Lumencor’s Beaverton, Oregon facility on January 3, 2018. *See* Exhibits 15 and 16.

54. Images of the sample Accused Product, as shipped to Lumencor, are shown in Exhibits 17 and 18.

55. The sample Accused Product bears markings that indicate that it was manufactured in Ontario, Canada, by Respondent LDGI, as demonstrated by the label shown in Exhibit 17.

56. The sample Accused Product bears markings indicating that it is branded and sold by Respondent Excelitas, as shown in Exhibit 18.

57. On information and belief, the sample Accused Product was imported into the United States from Canada by LDGI and/or Excelitas, whereupon it was sold by Excelitas to BioVision for distribution within the United States.

IX. CLASSIFICATION OF THE ACCUSED PRODUCTS UNDER THE HARMONIZED TARIFF SCHEDULE OF THE UNITED STATES

58. On information and belief, the infringing Accused Products may be classified under at least the following heading and subheading of the Harmonized Tariff Schedule of the United States (“HTS”): 9018.90.20. These classifications are intended for illustration only and are not intended to restrict the scope of any exclusion order or other remedy ordered by the Commission.

X. THE DOMESTIC INDUSTRY

59. With respect to each of the Asserted Lumencor Patents, a domestic industry, as defined by 19 U.S.C. §§ 1337(a)(1)(A) and 1337(a)(2)–(3), exists in the United States relating to Lumencor’s Domestic Industry Products and the Asserted Lumencor Patents, which are practiced by Lumencor’s Domestic Industry Products.

60. Lumencor’s Domestic Industry Products sold domestically are designed, developed, assembled, and supported in the United States.

61. Lumencor manufactures, designs, develops, engineers, and tests the Domestic Industry Products for final sale in its Beaverton, Oregon facility. All Domestic Industry Products are designed, developed, engineered, manufactured, and tested in Beaverton, Oregon.

62. On the basis of Lumencor’s domestic investments, a domestic industry related to the Domestic Industry Products that practice the Asserted Lumencor Patents currently exists.

63. Confidential Exhibit 22 provides further detail regarding Lumencor’s domestic activities and investments with respect to Lumencor’s Domestic Industry Products.

A. Technical Prong

64. Lumencor practices the Asserted Lumencor Patents in the United States through its light engine product lines including, for example, Lumencor’s ASTRA[®], AURA II[®], AURA III[®],

LYNX[®], MONSTRA II[®], SPECTRA[®], SPECTRA FIA[®], SPECTRA X[®], SPECTRA III[®], SOLA FISH[®], SOLA SE[®], SOLA SM[®], TARGA[®], and MIRA[®] light engines.

65. The chart below identifies exemplary Domestic Industry Products that Lumencor is asserting are protected by at least one claim of one or more of the Asserted Lumencor Patents:

Lumencor's Domestic Industry Products	Patent Applicability		
	'722	'564	'055
Astra [®]	Yes	Yes	Yes
Aura [®]	Yes	Yes	Yes
Aura II [®]	Yes	Yes	Yes
Aura III [®]	Yes	Yes	Yes
Celesta [®]	Yes	Yes	Yes
Lynx [®]	Yes	Yes	Yes
Mira [®]	No	Yes	Yes
Monstra II [®]	Yes	Yes	Yes
Sola FISH [®]	Yes	Yes	Yes
Sola SE [®]	Yes	Yes	Yes
Sola SM [®]	Yes	Yes	Yes
Spectra [®]	Yes	Yes	Yes
Spectra FIA [®]	Yes	Yes	Yes
Spectra III [®]	Yes	Yes	Yes
Spectra X [®]	Yes	Yes	Yes
Targa [®]	No	Yes	Yes

66. Pursuant to Commission Rule 210.12(a)(9)(ix), claim charts applying a representative claim of each Asserted Lumencor Patent to a representative Lumencor Domestic Industry Product are attached to this Complaint as Exhibits 19–21.

B. Economic Prong

67. Lumencor satisfies the requirements of 19 U.S.C. § 1337(a)(3) through its activities in the United States directed to its Domestic Industry Products. This domestic industry includes (1) significant and continuous investments by Lumencor in plant and equipment, and (2) significant and continuous investments by Lumencor in labor and capital, in the United States with respect to the Domestic Industry Products.

68. All production and customer services relating to the Domestic Industry Products are performed in the United States.

1. Lumencor's Significant Investment in Plant and Equipment

69. A domestic industry as defined by 19 U.S.C. § 1337(a)(3)(A) exists in the United States with respect to the articles protected by the Asserted Lumencor Patents by reason of Lumencor's significant investment in plant and equipment.

70. Lumencor maintains its headquarters in Beaverton, Oregon, in which it conducts its manufacturing, design and development, engineering, research and development, product and operations management, testing, and technical support activities. Lumencor's plant expenses include rent, maintenance, repairs, utilities, insurance, leasehold improvements, and property taxes. Confidential Exhibit 22 more specifically details Lumencor's investments in its plant and other related expenses.

71. Additionally, Lumencor uses various equipment, tools, and software in connection with its activities involving the Lumencor Domestic Industry Products protected by the Asserted Lumencor Patents. Equipment that Lumencor invests in includes lab equipment, manufacturing equipment, manufacturing assets, engineering assets, office equipment, furniture, software, and demonstration units. Confidential Exhibit 22 more specifically details Lumencor's investments in equipment and other related expenses.

2. Significant Employment of Labor or Capital

72. A domestic industry as defined by 19 U.S.C. § 1337(a)(3)(B) exists in the United States with respect to the articles protected by the Asserted Lumencor Patents by reason of Lumencor's significant employment of labor and/or capital.

73. Lumencor maintains a domestic workforce at its headquarters in Beaverton, Oregon, where Lumencor's employees engage in work directly related to the Domestic Industry

Products. These employees perform manufacturing, design and development, engineering, research and development, product and operations management, testing, and technical support activities related to the Domestic Industry Products.

74. Confidential Exhibit 22 more specifically details Lumencor's investments in labor and capital.

XI. REQUESTED RELIEF

WHEREFORE, by reason of the foregoing, Lumencor respectfully requests that the United States International Trade Commission:

A. Institute an immediate investigation pursuant to Section 337 of the Tariff Act of 1930, as amended, 19 U.S.C. § 1337, into the violation of Section 337 based on the sale for importation into the United States, importation, and/or sale within the United States after importation of Respondents' Accused Products that infringe one or more claims of the Asserted Lumencor Patents;

B. Schedule and conduct a hearing pursuant to Section 337(c), for purposes of receiving evidence and hearing argument concerning whether there has been a violation of Section 337, and following the hearing, to determine that there has been a violation of Section 337;

C. Issue a permanent limited exclusion order forbidding entry into the United States of Light Engines imported, sold for importation, or sold after importation by Respondents that infringe the Asserted Lumencor Patents;

E. Issue permanent cease and desist orders, pursuant to Section 337(f), directing Respondents to cease and desist from the importation, sale, offer for sale, marketing, advertising, packaging, inventorying, distribution, transfer, or solicitation of any sale by Respondents of Light Engines that infringe the Asserted Lumencor Patents;

F. Impose a bond, pursuant to 19 U.S.C. §§ 1337(e), (j), upon Proposed Respondents' importation of the Accused Products that infringe any claim of the Asserted Lumencor Patents during the 60-day Presidential review period to prevent further injury to Lumencor's domestic industry relating to the Asserted Lumencor Patents; and

H. Grant all such other and further relief as it deems appropriate under the law, based upon the facts complained of herein and as determined by the investigation.

Dated: February 2, 2018

Respectfully submitted,



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